Prevalence of Suicidal Feelings in a Sample of Non-Consulting Medical Students

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ABSTRACT

516 subjects representing a final year non-consulting medical students were studied as to the occurrence of suicidal feelings of different degrees. A total of 12.6% reported suicidal feelings of some degree in the past year. Responses ranged along a continuum such that subjects reporting more intense feelings also reported the less intense feelings.

For 5.6% the maximum intensity consisted only of feelings that life was not worthwhile, 4% reached the point of having thought of taking their lives, 0.9% seriously considered suicide or made plans and 0.4% made an actual suicide attempt.

Subjects experiencing suicidal feelings in the last year reported more minor psychiatric symptoms, particularly of depression. They had experienced more stressful events and somatic illness. In these respects they resembled the description of completed suicide.

INTRODUCTION

An understanding of the clinical and social factors which predispose to suicidal behaviour can be of great help in the management of suicidal patients. One such factor is the study of suicidal feelings among samples of the general population.

Feelings that life is not worthwhile living and thoughts of suicide are common in psychiatric patients, particularly depressives (Beck, 1967).

Very little information is available regarding the occurrence of suicidal feelings in samples of the general population. It has been em-

phasized in recent years that suicidal phenomena are diverse, and that completed suicide, suicidal attempts and suicidal feelings should not be equated. (Stengel and Cook, 1958; Neuringer, 1962).

This work will present data obtained from a questionnaire distributed among the final year students of Ain-Shams Medical School in an attempt to reveal the prevalence of suicidal feelings among a sample from the general population and its relationship to other data, including demographic characteristics, psychiatric symptoms and somatic illnesses and life stresses.

METHOD

The study was carried out on a sample of 516 medical students chosen at random from the final year students of Ain-Shams Medical Schools, during the academic year 1978-1979.

Information was collected by a special questionnaire based mainly on five questions:

1. Have you ever felt that life was not worth living?
2. Have you ever wished you were dead?
3. Have you ever thought of taking your life even if you would not really do it?
4. Have you ever reached the point where you seriously considered taking your life?
5. Have you ever made an attempt to take your life?

The first four questions explore suicidal feelings of differing intensity and the fifth question reports on suicidal attempts.

Subjects were given the choice of four possible responses; often, sometimes, hardly ever, never. Responses to each question are not mutually exclusive.

Wherever the response was other than "never" the subjects were requested to indicate whether this had occurred in the past year or earlier than the past year. Past year responses were only considered.

To examine the correlates of suicidal feelings the following information were included in the questionnaire :

1. Age, sex, marital status, religion, Social class was assigned according to the Hollingshead Two-Factor Index (Hollingshead, 1957).
2. Psychiatric symptoms : Items reflecting psychiatric symptoms in the last year were derived from a number of epidemiological studies (MacMillan, 1957; Gurin et al., 1960; Srole et al., 1962).
2. Life events which happened to the subject over the last year.
4. Somatic illness : Information was also collected regarding occurrence in the last year of a variety of somatic symptoms and illnesses, and of medical, psychiatric and other treatments.

RESULTS

TABLE I

Prevalence of suicidal feelings

	No.	%
Total number	516	100
Feeling life was not worth living	64	10.2
Wished they were dead	32	6.1
Thoughts of taking life	14	2.7
Seriously considered taking life	8	1.5
Made a suicidal attempt	3	0,4

Total No. = 516 subjects. Responses to the five questions were not mutually exclusive.

Table I shows the frequencies of positive responses for the five questions. It ranged from 10.2% for thoughts that life was not worth living to 0.4% for a suicidal attempt.

It is interesting to notice that the responses ranged in descending order by something of the order of one-half with each step to the next question. The stepwise drooping of rates in Table I with increased intensity of feelings suggesting a continuum whereby the more intense feelings included the less intense. Inter-relationships between the five questions were, therefore, examined by cross-tabulations; this confirmed the suspected relationship. The majority of the subjects reporting one of the more intense feelings also reported those that were less intense. Working from less to more intense, about half the positive responders to any question reported the feeling or behaviour on the next level, and half did not.

As this work is a part of a comprehensive study aiming to find a method to detect subjects with suicidal risk, both in the general population and among psychiatric patients, and in view of the graded nature of the responses in the questionnaire, a new variable was derived for each subject, consisting of the maximal feeling he reported.

TABLE II

Maximum degree of suicidal feelings reported in the last year.

	No.	%
Felt life was not worth living	26	5.6
Wished oneself dead	21	4.0
Thoughts of taking life	9	1.7
Seriously considered taking life	5	0.9
Suicidal attempt	3	0.4
	66	12.6
Total	516	

Table II shows the frequency of the maximal responses for the last year. Altogether 66 subjects comprising 12.6% of the total acknowledged some degree of suicidal feelings. Maximal responses ranged downwards from 5.6% for feelings that life was not worth living to 1.4% for suicidal attempt.

Relationships of suicidal feelings in the last year with demographic characteristics:

Sex was the only variable of a significant relationship to suicidal feelings in the last year as reported by 18.3% of females and 10.2% of males.

Psychiatric symptoms:

Subsequent analyses were carried out on matched groups. Each of the 66 subjects reporting suicidal feelings was matched with one non-suicidal subject for age, sex, marital status and social class.

TABLE III

Psychiatric symptoms and suicidal feelings in the last year.

Psychiatric symptoms	Subject with suicidal feelings N=66		Non-suicidal controls N=66		S.N.D.	P
	No.	%	No.	%		
Feel in poor spirits.	39	0.59	10	0.15	5.8	0.001
Wonder if anything is worthwhile.	40	0.61	1	0.14	6.4	0.001
Feeling you are going to have nervous breakdown.	35	0.53	1	0.015	8.1	0.001
Feel tired in the morning	42	0.64	15	0.23	5.2	0.001
Feel no one understands you.	40	0.61	14	0.21	5.1	0.001
Feel weak all over.	32	0.48	16	0.24	2.96	0.001

Psychiatric symptoms	Subject with suicidal feelings N=66		Non-suicidal controls N=66		S.N.D.	P
	No.	%	No.	%		
Loss of appetite.	29	0.44	6	0.09	4.96	0.001
Nervousness.	45	0.68	15	0.23	5.8	0.001
Unable to take care of things because unable to get going.	28	0.43	19	0.14	2.77	0.001
Prefer to be alone.	41	0.62	10	0.15	6.36	0.001
Hands tremble.	25	0.38	1	0.015	5.9	0.001
Difficulty keeping thoughts organized.	44	0.67	15	0.23	5.2	0.001
Bothered by upset stomach	29	0.44	9	4.14	5.2	0.001
Hands sweat excessively.	49	0.74	22	0.33	5.2	0.001
Difficulty in concentrating	15	0.23	2	0.03	3.6	0.001
Illhealth affects amount of work done.	29	0.44	8	0.12	4.3	0.001
Heart beating hard.	30	0.45	8	0.12	4.5	0.001
Bothered by all sorts of pain.	20	0.30	3	0.05	4.0	0.001
Trouble sleeping.	25	0.38	5	0.07	4.6	0.001
Spells of dizziness.	35	0.53	10	0.15	5.1	0.001
Difficulty getting up in the morning.	13	0.20	3	0.05	2.7	0.01
Nightmares.	30	0.65	15	0.23	2.75	0.01
Shortness of breath when not overexerting.	15	0.23	6	0.09	2.23	0.05
Cold sweats.	18	0.27	10	0.15	1.7	N.S.
Smoking in last year.	10	0.15	3	0.05	1.96	0.05
Don't feel healthy enough to carry out things you would like to do	16	0.24	16	0.15	1.3	N.S.
Any health problems.	10	0.15	2	0.03	2.4	0.002

Relationships were examined to 28 symptoms used in previous surveys (MacMillan, 1957; Gurin et al., 1960; Srole et al., 1962). Most were neurotic phenomena and somatic symptoms. Findings are shown in Table III.

There were significant relationships with 28 of the symptoms. All were in the direction such that more symptoms were reported by the subjects with suicidal feelings. The strongest relationships were with

feelings of poor spirits, feeling on the verge of breakdown, feeling tired in the mornings, feeling no one understands, feeling weak all over, loss of appetite, inability to get going, feeling of nervousness, preferring to be alone, trembling and headaches. These suggested a cluster of symptoms related to depression.

Life events

TABLE IV

Number of life events reported in last year.

No. of life events	Subjects reporting suicidal feelings		Non-suicidal controls	
	No.	%	No.	%
None	21	32	28	42.5
One	16	24	14	36.5
Two	21	32	11	16.5
Three or more	8	12	3	4.5
Total	66	100	66	100

Table IV shows the total number of life events reported by the two groups in the year before the study. Subjects with suicidal feelings reported significantly more life events. 44% of suicidal subjects reported two or more life events, but only 14% of the controls did so ($p < 0.001$).

Somatic illness and medical treatments.

Detailed inquiry was made for a large number of somatic complaints and illnesses, mostly minor in the last year; but those reported were too infrequent for separate analysis.

There was a highly significant difference in the total number of illnesses reported by the two groups. Three or more illnesses were

reported by 58% of subjects with suicidal feelings as opposed to 23% of non-suicidal group ($p < 0.001$).

Suicidal subjects were significantly more likely to have tranquillizers or sleeping tablets, but only five of them had seen a psychiatrist as opposed to two subjects from the control group.

DISCUSSION

The findings of this study suggest the existence of a continuum of suicidal feelings. The combined one year prevalence for these findings was 12.5% with the minor degrees most prominent.

There are few epidemiological studies of suicidal feelings with which these findings can be compared. Swanson et al. (1971) obtained a rate of 15.5%.

Our finding of three attempts in 516 subjects of a selected population however was too high for any reliable estimate, i.e. 581 per 100.000. Our previous work (Okasha et al.) in 1979 gave an approximate estimate of suicidal attempts among a sample of an Egyptian population of 38 per 100.000.

Although the feelings admitted by our subjects appear similar to those reported by depressed psychiatric patients, they may not necessarily have the same quality. Survey responses cannot be equated directly with clinical phenomena.

The majority of these subjects were not receiving any treatment and most reported only the more minor degrees of suicidal feelings. We are dealing here largely with subclinical disturbances in the general population.

Relationships to attempted and completed suicide :

In contrast to the scanty epidemiological literature on suicidal feelings, there have been many studies of suicidal attempts and completed

suicides. This literature contains two broad contrasting tendencies. In many aspects attempted and completed suicide can be regarded as two distinct and separate kinds of act, differing in quality and occurring in different populations (Stengel and Cook, 1958; Schneidman and Farberow, 1961). On the other hand completed suicide can to some extent be regarded as a more severe version of attempted suicide; the two phenomena overlap and suicide attempters have a moderately high risk of ultimate suicide. (Tuckman and Youngman, 1963). The same questions arise as to the relationships with suicidal feelings.

Five questions regarding suicide were incorporated in this study. However, cross tabulations showed that, at least for the four lesser questions on feelings, they related to each other in the form of a continuum ranging from mild to severe in which subjects reporting the more severe feelings usually also reported the milder ones.

The question which at this stage is: is there such a continuum ranging from the milder suicidal feelings to attempts of suicide or completed suicide ?. If we can establish the presence of such a continuum, then suicidal feelings can be used as predictors of actual suicidal acts. However only 3 subjects responded to the fifth question, and neither series of analysis could, therefore, throw much light on the relation to attempted suicide.

Relationships of suicidal feelings to demographic characteristics in this study showed that subjects with suicidal feelings were more likely to be females. In this respect they resembled suicidal attempters.

The most marked relationship was with minor psychiatric symptoms and within this was a cluster of symptoms suggestive of depression. Previous authors had shown that the rate of completed suicide is likewise higher in persons with a history of psychiatric disorder, and within this group the highest rate for any diagnosis is that for depression (Temoche, Pugh and MacMillan, 1964; Pokorny, 1964).

The third major area related to suicidal feelings was life stress. Once again stressful events often precede suicide (Litman and Farberow, 1961;, Lastly suicidal feelings were correlated with somatic illness, also a recognized association of suicide (Litman and Farberow, 1961).

Thus the correlates of suicidal feelings in a sample of the general population in this study is closely parallel to the associations of completed suicide. However, in demographic characteristics subjects reporting suicidal feelings resemble suicide attempters only in the sex prevalence. The same question arises again: do suicidal feelings represent minor degrees of what may culminate in suicidal acts? .

The precise relationship between the suicidal feelings in the general population and suicidal acts could only be determined by:

1. Longitudinal and follow-up studies.
2. The prevalence of the occurrence of suicidal feelings in suicide attempters.
3. The prevalence of the occurrence of suicidal feelings in psychiatric patients especially those suffering from depression with suicidal risk.

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ABSTRAIT

Prévalence des tendances au suicide chez un échantillon d'étudiants de médecine non-consultant.

516 sujets de représentatifs d'étudiants de médecine de la dernière année, non-consultant, ont été étudiés relativement à l'occurrence de tendances au suicide de différents degrés.

Un total de 12,6% rapporta des tendances au suicide de certain degrée dans l'année précédente.

La marge des réponses formait une continuité tels que les sujets rapportant les tendances les plus intenses, rapportèrent aussi les tendances les moins intenses.

Pour 5,6% de ces personnes l'intensité maximum de ces tendances se trouvait dans des sentiments que la vie n'a aucune valeur et ne mérite pas être vécu, 4% sont allés jusqu'à avoir l'idée de se débarasser de leur vie, 0,9% ont sérieusement considéré le suicide ou firent des plans dans ce but, 0,4% ont accompli une tentative de suicide.

Les sujets ayant eu des tendances au suicide dans l'année précédente rapportèrent plus de symptomes psychiatriques mineurs, particulièrement depressifs. Ils subirent plus d'évènements pesant, ainsi que des maladies somatiques. En ceci ils ressemblent à la description du suicide accompli.

الملـــوجز

مدى انتشار الميول الانتجارية فى عينة من طلبة الطب غير طالبى الاستشارة

فى هذا البحث تمت دراسة ٥١٦ فردا يمثلون طلبة السنة النهـــائية بكلية الطب من غير طالبى الاستشارة الطبية ، وذلك فيما يتعلق بتواجد ميول انتجارية لديهم من مختلف الدرجات · وقد وصل اجمالى من صرح بوجود ميول انتحارية لديهم بدرجات متفاوتة فى السنة الماضية الى ٦ر١٢٪ ، وقد كون اختلاف مدى الاجابات متصلا واحد ، فالأفراد الذين صرحوا بالميـــول الأكثر حدة قد صرحوا أيضا بالميول الأقل حدة ، وعند بيان حدة هذه الميول ظهر أن الحدة القصوى لنسبة ٦ر٥٪ منهم تتمثل فى أن الحياة لا تستحق الاهتمام ، فى حين وصل ٤٪ منهم الى حد وجود فكرة التخلص من حياتهم ، وأضمر ٩ر٠٪ الانتحار أو وضعوا خططا لذلك ، وحاول ٤ر٠٪ الانتحـــار بالفعل ·

وقد صرح الأفراد الذين خبروا تلك الميول الانتجارية فى السنة الماضية بوجود أعراض نفسية بسيطة اكتئابية بالأخص ، وقد تعرضوا أيضا لأحداث أكثر اجهادا وأمراض جسمانية ، وتبعا لذلك فقد تشابهوا ووصف الانتحـــار المنفذ ·